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08/005,381 01/15/93 NILSSEN

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MIS, D EXAMINER

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OLE K. NILSSEN  
CAESAR DRIVE  
BARRINGTON, IL 60010

ART UNIT

PAPER NUMBER

2502

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DATE MAILED: 07/16/93

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined  Responsive to communication filed on 6/18/93  This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1.  Notice of References Cited by Examiner, PTO-892.
2.  Notice re Patent Drawing, PTO-948.
3.  Notice of Art Cited by Applicant, PTO-1449.
4.  Notice of Informal Patent Application, Form PTO-152.
5.  Information on How to Effect Drawing Changes, PTO-1474.
6.  MEMORANDUM on DISCLAIMER

Part II SUMMARY OF ACTION

1.  Claims 1-43 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims \_\_\_\_\_ are allowed.

4.  Claims 1-43 are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8.  Formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable.  not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been  approved by the examiner.  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed on \_\_\_\_\_, has been  approved.  disapproved (see explanation).

12.  Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

EXAMINER'S ACTION

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Transistor Inverter Lamp Ballast With Parallel-Tuned Output Circuit.

2. The disclosure is objected to because of the following informalities:

a. The claim language should appear in the specification. The MPEP explains, in section 608.01(d), that in accordance with 37 CFR 1.73, the specification should have a brief summary of the invention preceding the detailed description, and including language commensurate with the invention as claimed, and not including language that is not commensurate with the invention as claimed. The present summary of the invention includes broad objects and descriptions that are not commensurate with the present claims. The summary of the invention should be revised so that it is commensurate with the present set of claims.

b. The specification does not have clear antecedence for the language in the claims since "clear antecedence" is antecedence that includes the exact words of the claims. One of ordinary skill in the art has to be knowledgeable of some things that are not specified, since that is what having ordinary skill in the art requires. However, as one of ordinary skill in the art exercises ordinary skill to understand a new set of claims in view of a specification that has different words, that are at least commensurate with the words used in the claims, the degree

of clarity of the words in the specification and in the claims is degraded. Therefor the specification should indeed be maintained so that there is absolute clarity in the claims.

c. On page 8, line 15, "staturable" should be --saturable--.

Appropriate correction is required.

3. Claims 1-43 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite since:

a. Claim 1, in lines 17 and 20, it is not clear what voltages "might exist" in the circuit that is claimed since there is not sufficient circuit detail claimed to know what voltages there could be between the particular terminals, i.e. the functional language is not supported by the structure.

b. Claim 4, in line 7, it is not clear what manner of circuit connection will result in the particular claimed negligible magnitude, i.e. the functional language is not supported by the structure.

c. Claim 5, structure is not claimed that provides the "negligible magnitude" and "substantially zero resistance" functions.

d. Claim 6, "might exist", "connected in such a manner", functions without sufficient structure - all effectively make the claim indefinite as in previous claims.

e. Claim 8, lines 12-14, it is not clear what the circuit has since it is not said that the transistors are included, only that a connection of two transistors is included; and there is not sufficient structure claimed to support the characterization of the inverter as causing a substantially sinusoidal AC voltage between a transistor terminal and a DC input terminal.

f. Claim 10, there is not sufficient structure claimed to support the claimed function.

g. Claim 12, there is not sufficient structure claimed to support the claimed function.

h. Claim 13, in lines 15 and 17, the notation "B-" and "B+" respectively, is unclear since it is ambiguous in the art except when it is defined, and so it should be defined in the claim.

i. Claim 15, there is not sufficient structure claimed to support the claimed function.

j. Claim 19, lines 13 and 15, "B-" and "B+" respectively, should be defined.

k. Claim 21, lines 7-9, the "absolute magnitude" function is not supported by the claimed structure; lines 11-14, the "conductive path exists" function is not supported by the claimed structure; lines 20-22, it is not clear what the circuit includes since it is not said that the transistors are included, only that a connection of two transistors is included.

l. Claim 22, there is not sufficient structure claimed to support the claimed function.

m. Claim 24, line 1, "a" should be -- and --.

n. Claim 25, lines 2-3, "in order to function as described" is confusing since it is necessary that what was claimed does indeed function as described; there is not sufficient structure claimed to support the claimed "powered from (to function as described)" function; it is not clear what functions that were described are being referred to.

o. Claim 26, lines 6-8, there is not sufficient structure to support the "there being an electrically conductive path" function; lines 17 and 19, "B-" and "B+" respectively, should be defined; note that after "winding;" in line 20, "having" from line 14 is not applicable and so the first and second transistors are not said to be in the third sub-circuit.

p. Claim 27, there is not sufficient structure to support the claimed function.

q. Claim 29, there is not sufficient structure to support the claimed function.

r. Claim 31, lines 10 and 11, "B-" and "B+" respectively, should be defined; lines 12-13, there is not sufficient structure to support the "voltage existing" function; lines 14-15, there is not sufficient structure to support the "magnitude being" function; lines 21-22, there is not sufficient structure to support the "voltage existing" function.

s. Claim 32, there is not sufficient structure to support the claimed function.

t. Claim 34, lines 13 and 14, "B-" and "B+" respectively, should be defined; lines 16-17, there is not sufficient structure to support the "voltage existing" function; lines 17-19, there is

not sufficient structure to support the "magnitude being" function; lines 22-23, there is not sufficient structure to support the "voltage existing" function.

u. Claim 36, the third sub-circuit only comprises a pair of transistors and some terminals, and so it is not seen how it can constitute a self oscillating inverter.

v. Claim 37, lines 2-4, there is not sufficient structure to support the "conductive path exists" function; lines 4-6, there is not sufficient structure to support the "magnitude is larger" function.

w. Claim 38, lines 6-8, there is not sufficient structure to support the "magnitude being higher" function; lines 12-15, there is not sufficient structure to support the function claimed.

x. Claim 39, there is not sufficient structure to support the claimed function.

y. Claim 40, lines 2-5, there is not sufficient structure to support the "connected to be subjected" function.

z. Claim 41, it is not clear that the second electronic assembly should include a periodically conducting element, so it is not clear what significance there is to the assembly not having a periodically conducting thyristor.

aa. Claim 42, there is not sufficient structure to support the "drawing" function.

bb. Claim 43, lines 2-3, there is not sufficient structure to support the "alternatingly conducting" function; lines 4-6, there is not sufficient structure to support the "convert" function;

and lines 6-7, there is not sufficient structure to support the "being supplied" function.

cc. The language of the claims lacks absolute clarity since it was not used in the specification.

The functional recitations that are present in the claims have not been given patentable weight because they are narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 6-8 and 10-42 are rejected under 35 U.S.C. § 102(b.) as being clearly anticipated by J. Rosa.

6. Claims 1-6, 8-12, 21-25, and 38-43 are rejected under 35 U.S.C. § 102(b.) as being clearly anticipated by C.M. Wenrich et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Mis whose telephone number is (703) 308-4907.

*David Mis*  
DAVID MIS  
EXAMINER  
GROUP ART UNIT 252

dm  
July 15, 1993